[illegible]

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[illegible] © 2018 [illegible]

[illegible]

- [illegible]:
  - [illegible]
  - [illegible]

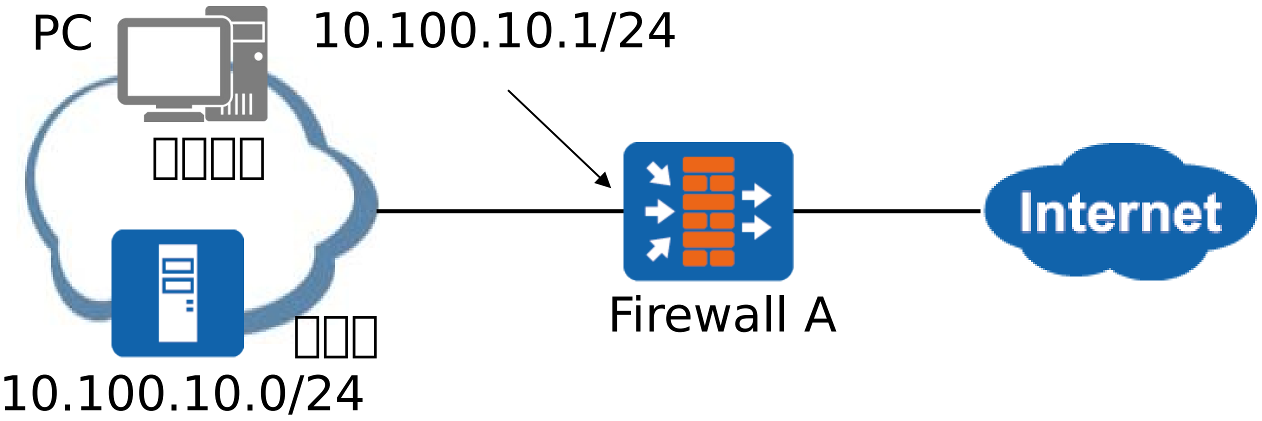
[illegible] © 2018 [illegible]

[illegible]

1. [illegible]
2. [illegible]

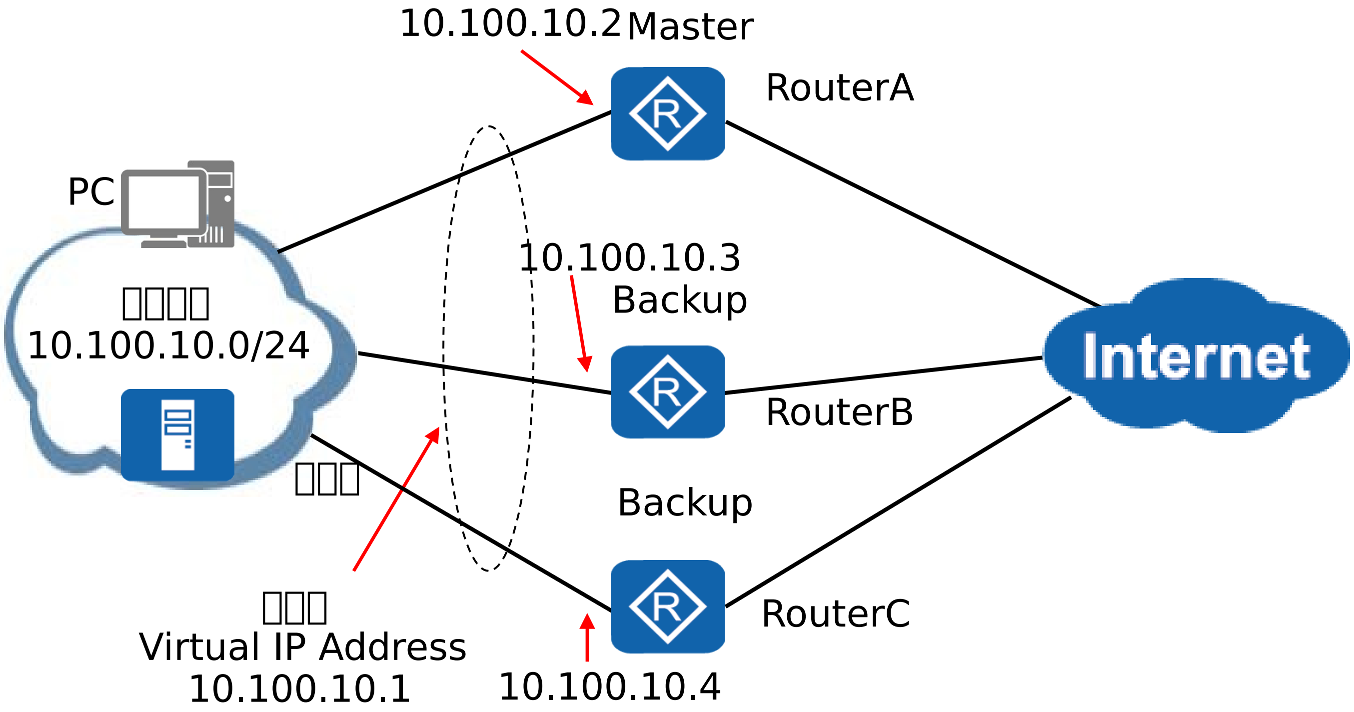
[illegible]

- [illegible] Firewall A [illegible] Firewall A [illegible] Firewall A [illegible]



[illegible]

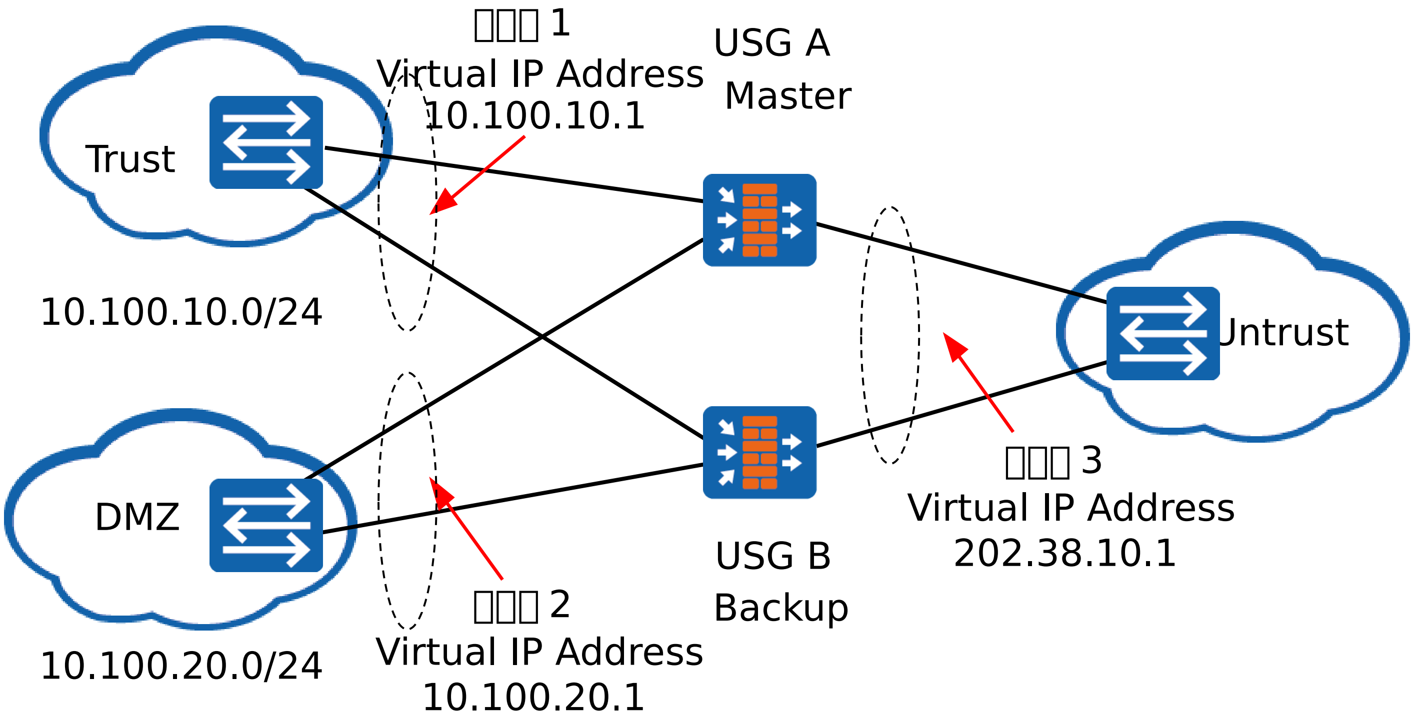
- [illegible] VRRP [illegible]



10.100.10.2
Master
RouterA
PC
[illegible]
10.100.10.0/24
10.100.10.3
Backup
RouterB
Internet
[illegible]
Backup
RouterC
[illegible]
Virtual IP Address
10.100.10.1
10.100.10.4

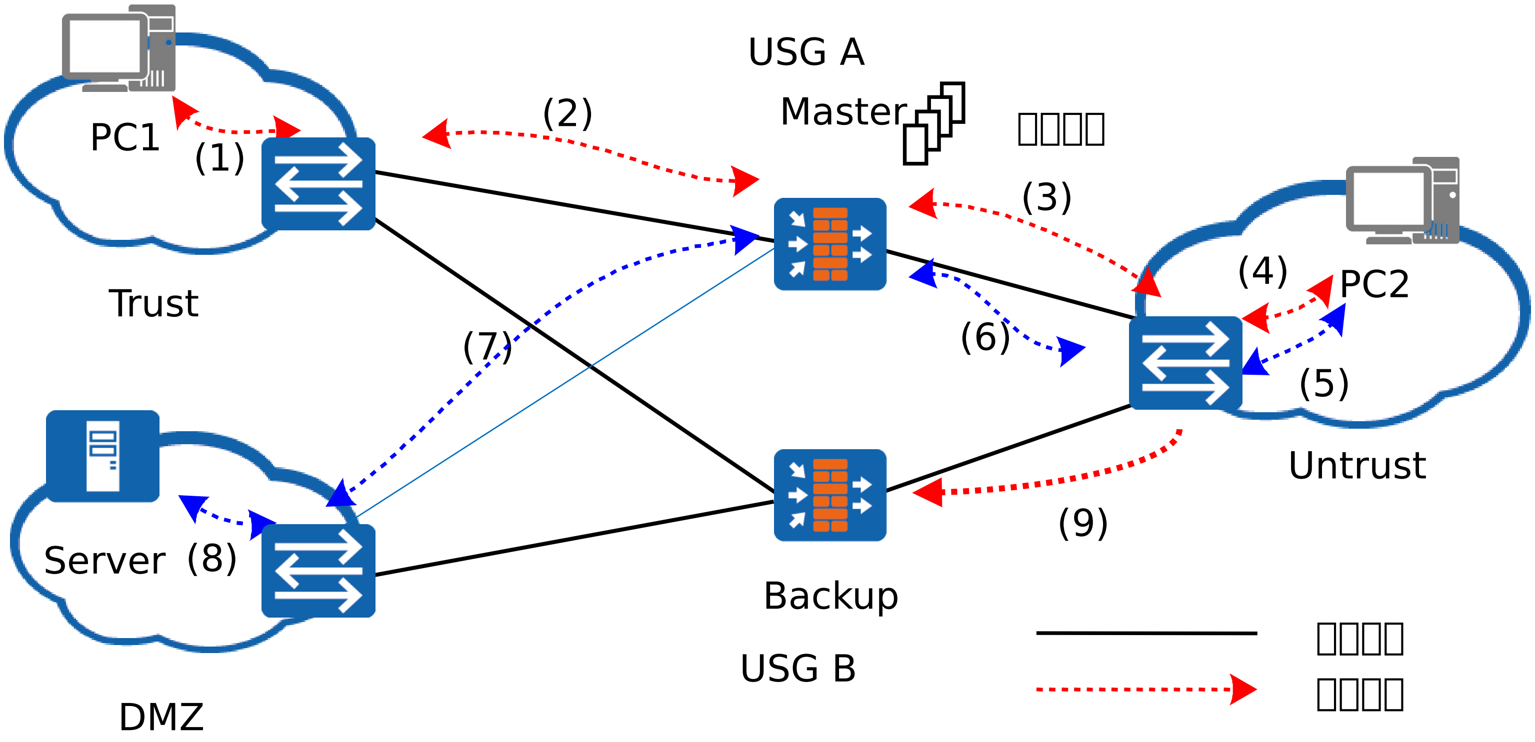
VRRP [illegible]

- [illegible] VRRP [illegible]


1
Virtual IP Address
10.100.10.1
USG A
Master
Trust
10.100.10.0/24
Untrust
DMZ
10.100.20.0/24
2
Virtual IP Address
10.100.20.1
USG B
Backup
3
Virtual IP Address
202.38.10.1

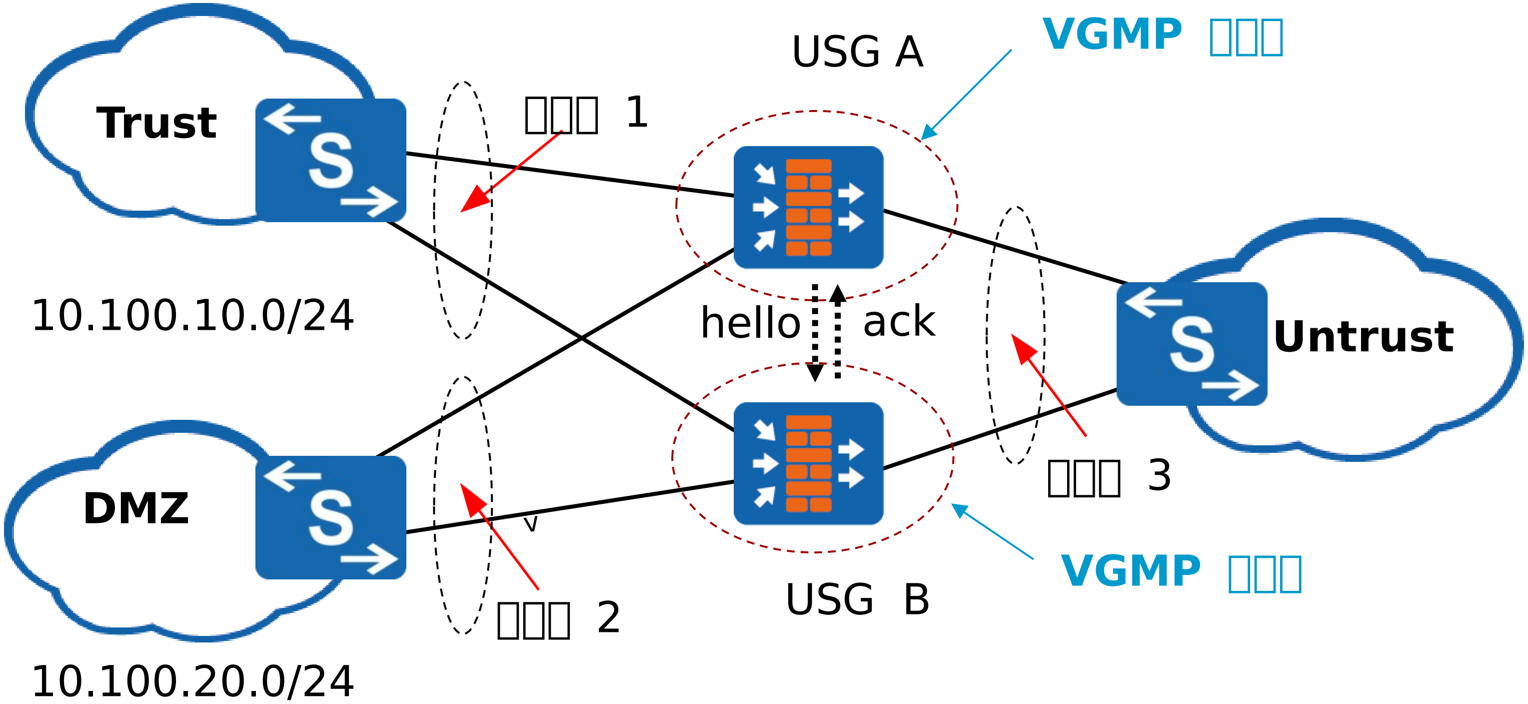
VRRP □□□□□□□□□□□□

- □□ VRRP □□□□□□□□□□□□


USG A
Master
□□□□
PC1
(1)
(2)
(3)
(4)
PC2
(5)
(6)
(7)
Trust
Untrust
Server
(8)
(9)
DMZ
Backup
USG B
□□□□
□□□□

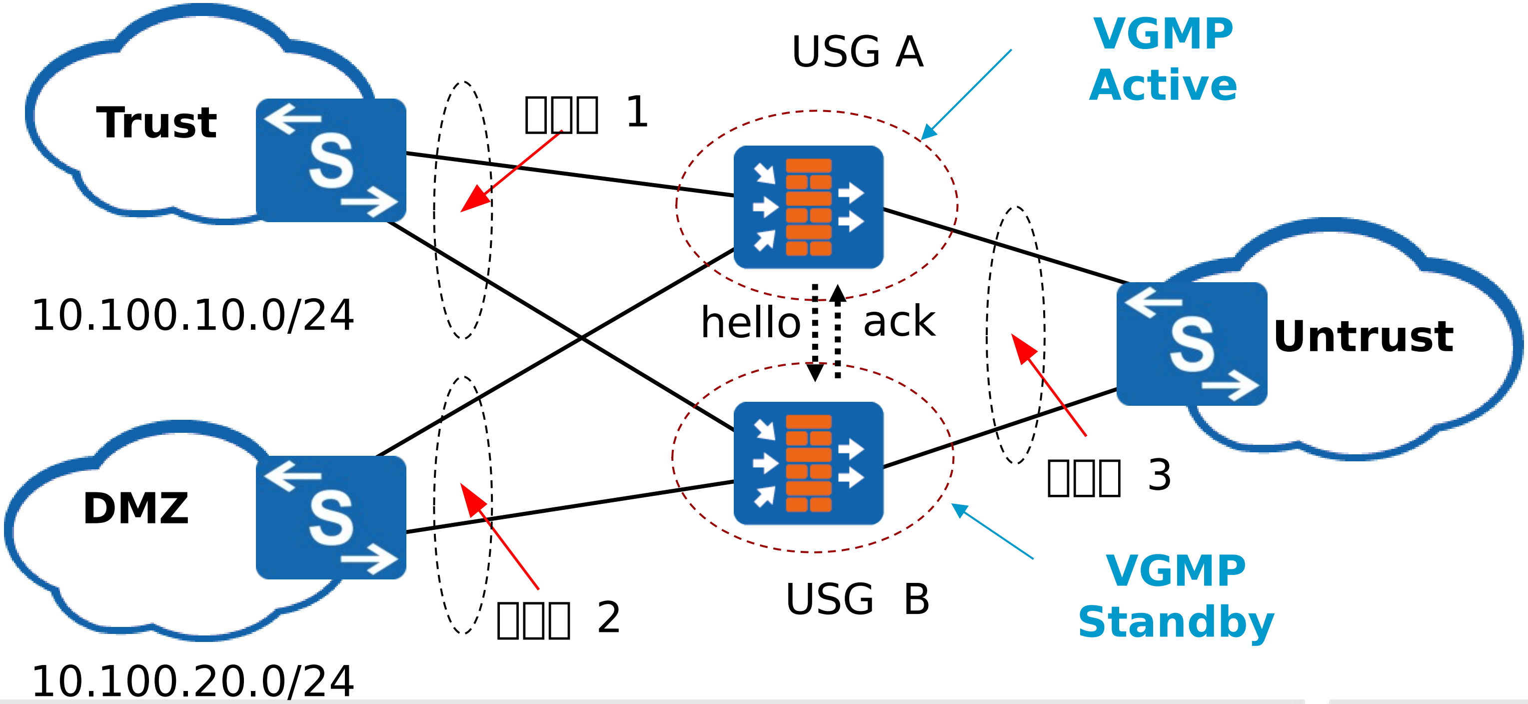
VRRP [illegible]

- [illegible] VRRP [illegible] VRRP [illegible] VGMP [illegible] VRRP Group Management Protocol [illegible]



VGMP □□□□

- □□□□□□ VGMP □ Active/Standby □□□□□□□□ VRRP □□□□□□□□□ Active/ Standby □□□
- □□□ Active □ VGMP □□□□□□□□□ HELLO □□□□□ Standby □□□□□□□□□□□□□ □□ VRRP □□□□□□□



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VGMP□□□

- □□□□□□□
  - VGMP□□□□□□□□VRRP□□□□□□□□
- □□□□
  - □□□

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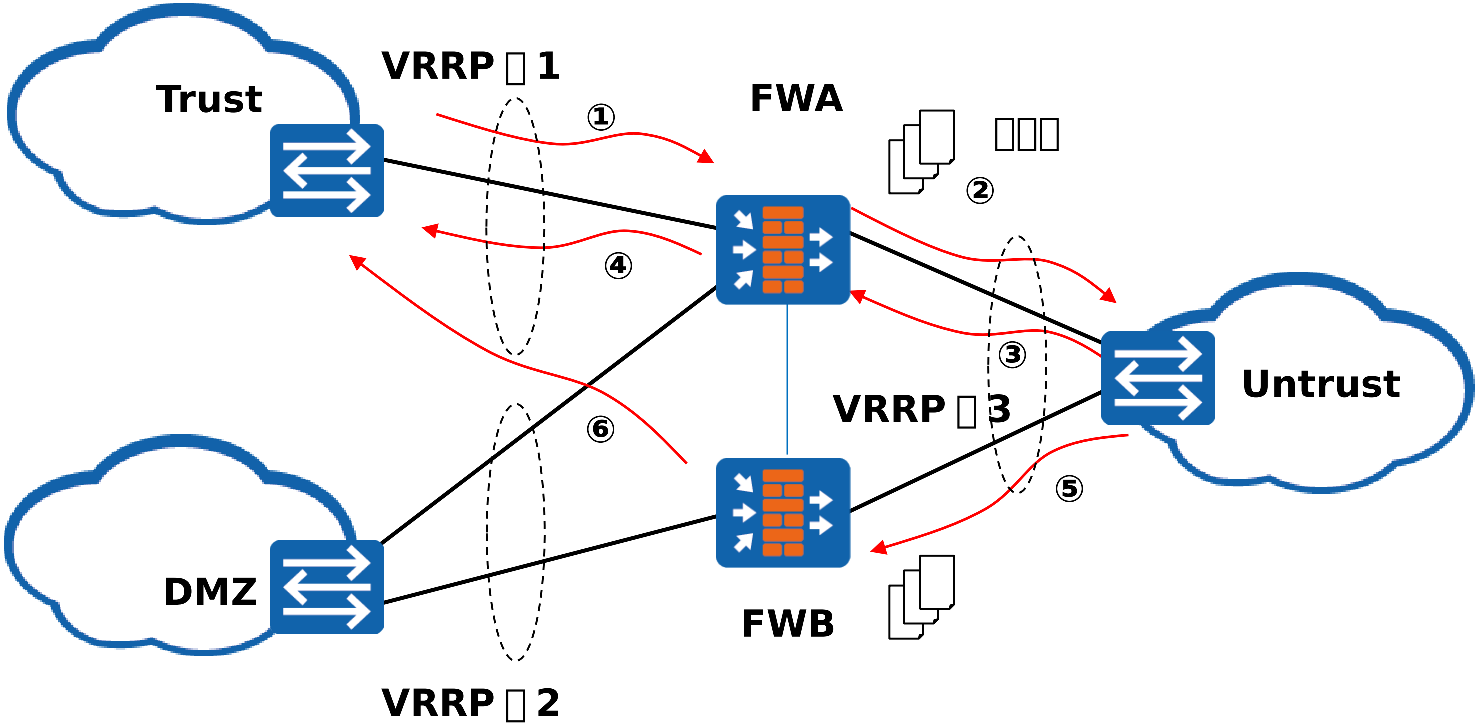
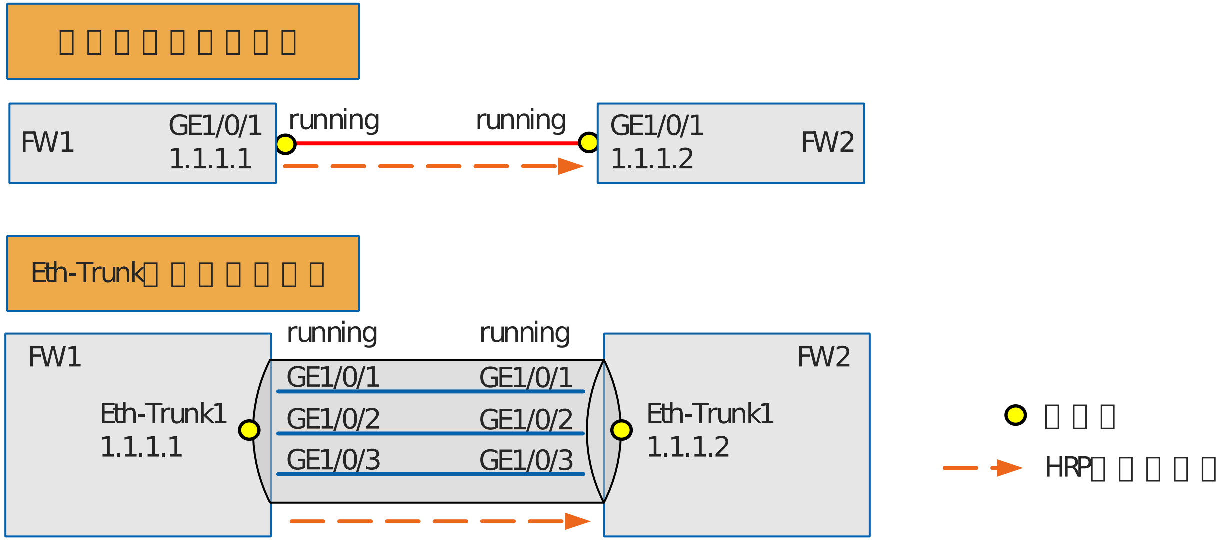
HRP □□□□

- HRP □ Huawei Redundancy Protocol □□□□□□□□□□□□
  □□□□□□□□□□□□□□□□□□□



HRP [illegible]

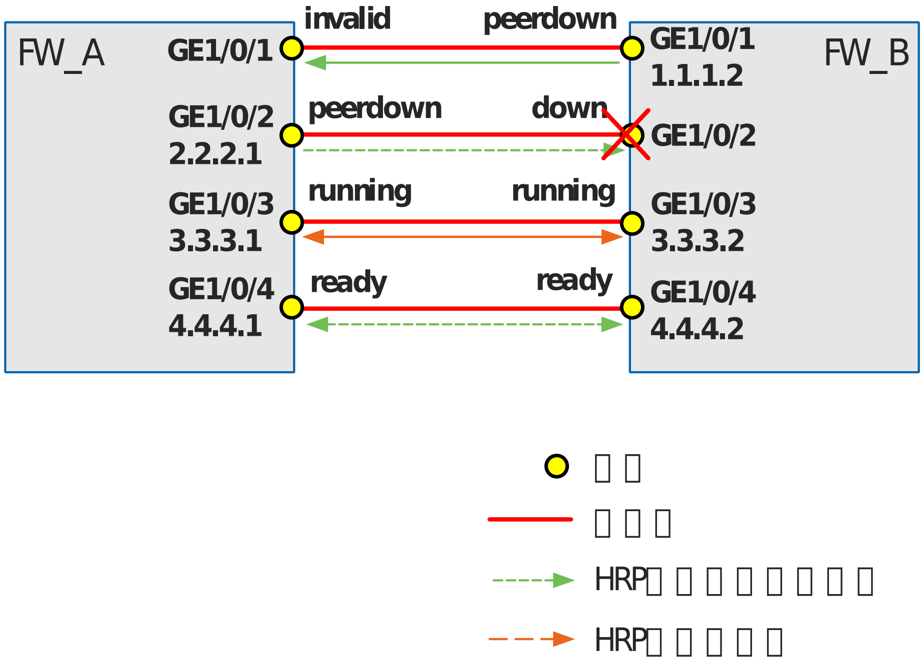
- [illegible] FW [illegible]
  - [illegible] IP [illegible] GE [illegible]
    [illegible] Eth-Trunk [illegible]



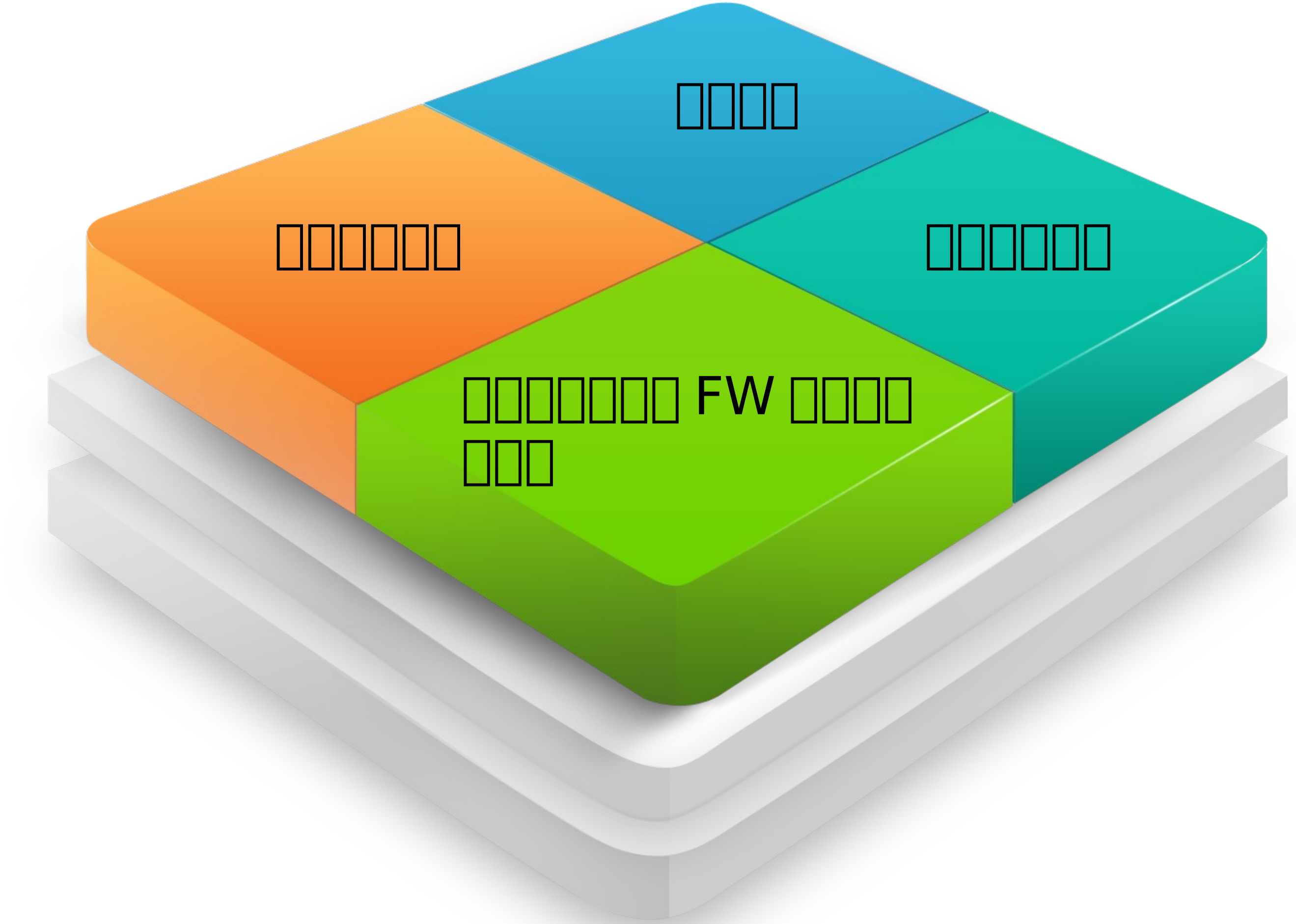
[illegible] © 2018 [illegible]

[illegible]

- HRP [illegible]
  - Invalid
  - Down
  - Peerdown
  - Ready
  - running



[illegible]

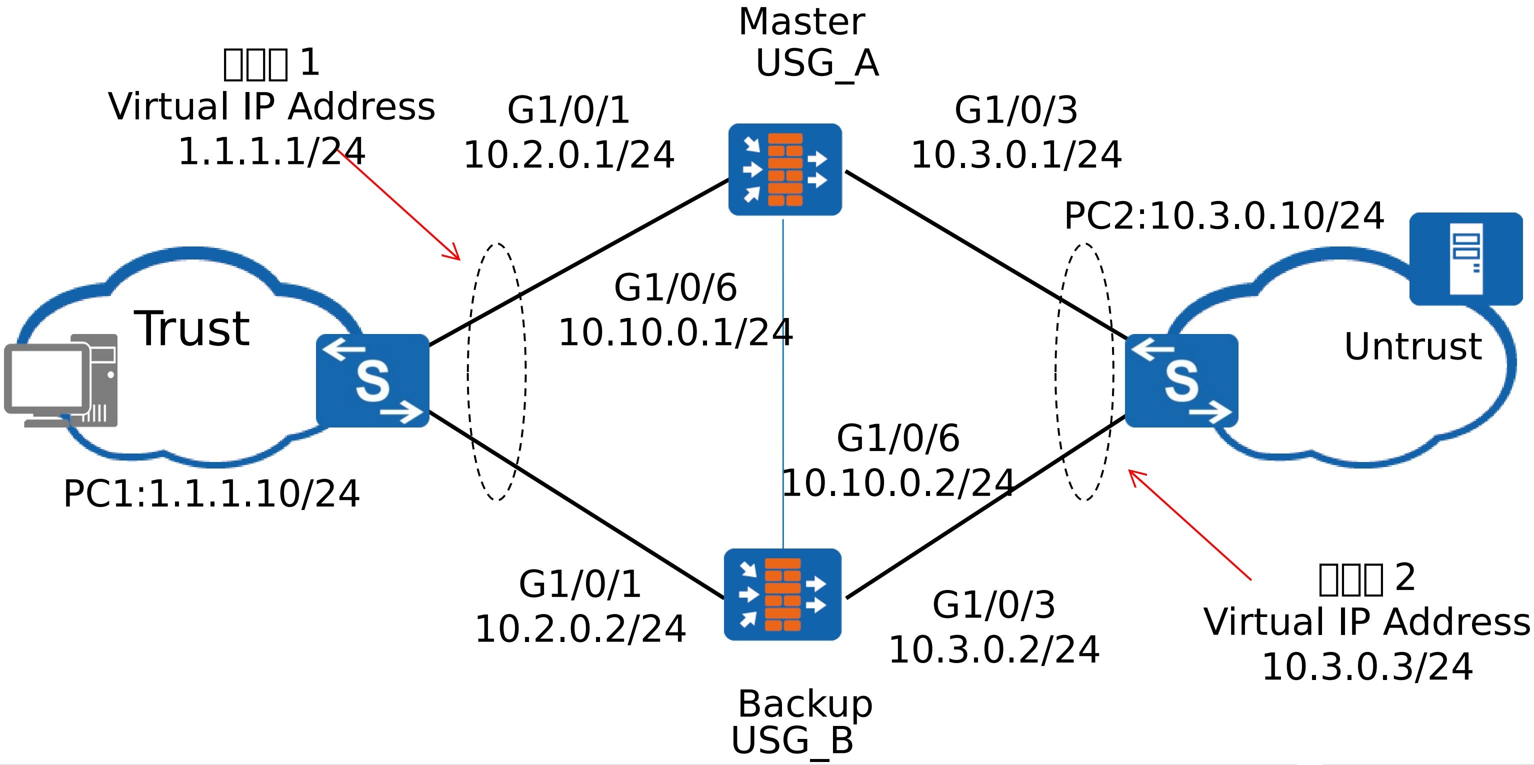

FW

[illegible]

1. [illegible]
2. **[illegible]**

[illegible]

- [illegible] VRRP [illegible] VGMP [illegible] VRRP [illegible]



VRRP □□□□□□□ - CLI

- □□□□□□□VRRP□

```
vrrp  vrid virtual-router-ID virtual-ip virtual-address [ ip-
mask | ip-mask-length ] { active | standby }
```

- □□□□□□□□□active□standby□□□□□□□VRRP□□□□VGMP□□□□Active□Standby□□□□
- □□□□□□□□□GigabitEthernet□□□□□□□□255□VRRP□□

HRP [illegible] - CLI

- [illegible]

```
hrp interface interface-type interface-number [ remote { ip-address | ipv6-address } ]
```

- [illegible] HRP [illegible]

```
hrp enable
```

- [illegible]

```
hrp standby config enable
```

- [illegible]

```
hrp auto-sync [ config | connection-status]
```

- [illegible]

```
hrp mirror session enable
```

VRRP [illegible] - CLI

- USG_A [illegible] VRRP [illegible] 1 [illegible]

```
[USG_A]interface GigabitEthernet 1/0/1
[USG_A-GigabitEthernet 1/0/1 ]ip address 10.2.0.1 24
[USG_A-GigabitEthernet 1/0/1 ]vrrp vrid 1 virtual-ip 1.1.1.1
255.255.255.0 active
```

- USG_B [illegible] VRRP [illegible] 1 [illegible]

```
[USG_B]interface GigabitEthernet 1/0/1
[USG_B-GigabitEthernet1/0/1 ]ip address 10.2.0.2 24
[USG_B-GigabitEthernet 1/0/1 ]vrrp vrid 1 virtual-ip 1.1.1.1
255.255.255.0 standby
```

[illegible] © 2018 [illegible]

HRP □□□□ - CLI

- USG_A □□ HRP □□□

```
[USG_A]hrp enable
[USG_A]hrp mirror session enable
[USG_A]hrp interface GigabitEthernet 1/0/6
```

□□□□ © 2018 □□□□□□□□

[illegible] VRRP [illegible] - CLI

- [illegible] VRRP [illegible]

```
HRP_A<USG_A>display vrrp interface G1/0/3
GigabitEthernet1/0/3 | Virtual Router 2
    VRRP Group : Active
    state : Active
    Virtual IP : 10.3.0.3
    Virtual MAC : 0000-5e00-0102
    Primary IP : 10.3.0.1
    PriorityRun : 120
    PriorityConfig:100
    MasterPriority : 120
    Preempt : YES   Delay Time : 0
    Advertisement Timer : 1
    Auth Type : NONE
    Check TTL : YES
```

[illegible] © 2018 [illegible]

[illegible] HRP [illegible] - CLI

- [illegible] Master [illegible]

```
HRP_A<USG_A>dis hrp state
The firewall's config state is: ACTIVE

 Current state of virtual routers configured as active:
             GigabitEthernet1/0/1    vrid   1 : active
             GigabitEthernet1/0/3    vrid   2 : active
```

[illegible] © 2018 [illegible]

[illegible] - Web

- [illegible]“[illegible] > [illegible] > [illegible] > [illegible]”[illegible]

双机热备
配置
监控项
当前状态
详细
当前运行模式
主备备份
当前运行角色
主用（切换后运行的时间：0 天 0 时 0 分）
详细
当前心跳接口
无
主动抢占
已启用
配置一致性
初始化(检测时间:0/0/0 00:00:00)
详细
一致性检查
虚拟IP
接口名称 | VLAN
IP-Link
BFD

□□□□□□□□□□ - Web

- □□□□□□□□“□□”□□□□□ USG_A □□□□□□ IP □□□□
  “□□”□□□ VRRP □□□

[illegible] - Web

- [illegible]“[illegible]”[illegible] USG_B [illegible] IP [illegible]“[illegible]”[illegible] VRRP [illegible]

□□□□□□□□□□□□ - Web

- □□□□□□□□□□“□□”□□□□□□□□□□□□□□□

双机热备
配置
监控项
当前状态
详细
当前运行模式
主备备份
当前运行角色
主用（切换后运行的时间：0 天 0 时 12 分）
详细
当前心跳接口
主动抢占
配置一致性
检查
虚拟IP
接口名称 | VLAN
IP-Link
BFD
主备切换信息
运行角色： 主用
切换后运行时间： 0天0小时14分钟
切换记录信息表
序号
切换时间
切换内容
原因
0 2018-5-13 16:48:21 初始化状态切换到备用状态 双机热备功能启动
1 2018-5-13 16:48:38 备用状态切换到主用状态 心跳报文超时
共2条
确定

□□□□□□□□□□ - Web

- □□□□□□□□□□□□□□□□□VRRP□□□□□□□□□

双机热备

配置

监控项	当前状态	详细
当前运行模式	主备备份	
当前运行角色	主用（切换后运行的时间：0 天 0 时 18 分）	详细
当前心跳接口	无	
主动抢占	已启用	
配置一致性	初始化(检测时间:0/0/0 00:00:00)	详细 一致性检查
虚拟IP		
10.3.0.3(GE1/0/3)	✔	主状态
1.1.1.1(GE1/0/1)	✔	主状态
接口名称 | VLAN		
IP-Link		
BFD		

[illegible]

1. HRP [illegible] HRP [illegible]
   [illegible]

   A. [illegible]

   B. [illegible]

2. [illegible]

   A. VGMP

   B. VRRP

   C. HRP

   D. OSPF

[illegible]

- [illegible]
- [illegible]

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